

What is claimed is:

1. A method of coating a thermoplastic composition from a coating device onto a substrate, said method comprising the steps of:
making said thermoplastic composition flowable;
advancing said substrate along a path;
dispensing a continuous film of said compositions from said coating device;
suspending said film of said composition being dispensed between said coating device and said substrate prior to contacting said film with said advancing substrate.
2. The method according to claim 1, wherein said substrate is a textile material.
3. The method according to claim 1, wherein the coating device is spaced from the path of the substrate at a distance between about 0.5 to about 20 mm.
4. The method according to claim 3, wherein the distance between the coating device and the substrate is less than about 10 mm.
5. The method according to claim 1, wherein the coating device is a slot nozzle.
6. The method according to claim 5, wherein said slot nozzle has a shim gap of less than 5 mm.
7. The method according to claim 1, wherein the substrate is directed substantially vertically immediately after passing the coating device.
8. The method according to claim 1, wherein the thermoplastic composition is dispensed onto the substrate such that the coating weight is less than about 30 g/m².
9. The method according to claim 1, wherein the thermoplastic composition is coated at a rate of at least about 200 meters/min.

Sub-
A2

0005405-0403300

Sub
I 7

Sub
I 7

- Sub 1 7
- Sub 13
10. The method according to claim 1, wherein the thermoplastic composition is released from the coating device at a temperature of less than about 160°C.
11. The method according to claim 1, wherein the thermoplastic composition is released from the coating device at a temperature of less than about 125°C.
12. The method according to claim 1, wherein the thermoplastic composition is released from the coating device at a temperature of less than about 110°C.
13. The method according to claim 1, wherein the complex viscosity of the thermoplastic composition at the coating temperature is less than about 500 poise at about 1,000 radians/sec and ranges from about 100 to about 1,000 poise at about 1 radian/sec.
14. A disposable article comprising at least one permeable substrate layer and at least one fluid impermeable barrier layer substantially adhered to the permeable substrate layer on at least one face, wherein said barrier layer comprises a thermoplastic composition coated as a continuous film at an area weight of less than 30 g/m².
15. The disposable article of claim 14, wherein the article further comprises at least one absorbent material.
16. The disposable article of claim 14, wherein the barrier layer is moisture-vapor permeable.
17. The disposable article of claim 14, wherein the outer layer is a textile material.
18. The article of claim 14, wherein the barrier layer comprises a thermoplastic composition such that the complex viscosity of the thermoplastic composition at the coating temperature is less than about 500 poise at about 1,000 radians/sec.

09057406-040898

19. The article of claim 18, wherein the barrier layer comprises at least one polymer selected from the group consisting of block copolymers, water dispersible copolyesters, ethylenic copolymers, polyolefins, metallocene polyolefins, atactic polyolefins and mixtures thereof.
20. The article of claim 18, wherein the coating temperature is less than about 160°C.
21. The article of claim 14, wherein the barrier layer comprises a thermoplastic composition such that the complex viscosity of the thermoplastic composition at the coating temperature ranges from about 100 to 1,000 poise at about 1 radian/sec.
22. The article of claim 21, wherein the barrier layer comprises at least one polymer selected from the group consisting of block copolymers, water dispersible copolyesters, ethylenic copolymers, polyolefins, metallocene polyolefins, atactic polyolefins and mixtures thereof.
23. The article of claim 21, wherein the coating temperature is less than about 160°C.
24. The article of claim 14, wherein the thermoplastic composition forming the barrier layer is subsequently bonded to at least one other material.
25. The article of claim 14, wherein the thermoplastic composition is bonded to at least one other material inline after coating of the thermoplastic composition.
26. The article of claim 14, wherein the barrier layer comprises a hot melt adhesive.
27. The article of claim 14, wherein the area weight of the thermoplastic composition is less than about 20 g/m².
28. The article of claim 14, wherein the area weight of the thermoplastic composition is less than about 10 g/m².

868040-90425060

29. An article comprising a body fluid impermeable barrier wherein the area weight of said barrier layer is less than about 20 g/m².
30. The article of claim 29, wherein the area weight of said barrier layer is less than about 10 g/m².
31. A disposable article comprising at least one permeable substrate layer and at least one fluid impermeable barrier layer adhered to the permeable substrate layer on at least one face, wherein said barrier layer is a coating composition dispensed from a coating device as continuous film at a temperature of less than 160°C, and said coating device is spaced from the path of the substrate at a distance between about 0.5 to about 20 mm.
32. A thermoplastic coating comprising a thermoplastic composition wherein the complex viscosity at the coating temperature of said composition is less than about 500 poise at about 1,000 radians/sec and ranges from about 100 to about 1000 poise at 1 radian/sec, wherein said composition can be coated to produce a fluid impermeable barrier at an area weight of less than about 30 g/m².

Add A³

add B³

add E⁵

add I¹⁰

09057406-040898